

PORTLAND

ATARI CLUB

NEXT GENERAL MEETING

MONDAY, NOVEMBER 4, 1985 - 6:30 PM

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NOVEMBER 1985

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Atari Comes to PAC: Leonard Tramiel, Dave Duberman and Sig Hartmann

PORTLAND ATARI CLUB

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Commercial Advertising rates are; full page (7 X 9 1/2) - \$50, half page (7 X 4 1/2) - \$25, quarter page (3 1/4 X 4 1/2) - \$15. Ads must be prepaid and a 1/3 discount is given for 3 consecutive ads. The copy may vary in content, but the space must be the same in each issue. Send camera ready copy and check payable to PAC at the address below. Contact the Editor for other arrangements. Ad deadline is the 5th of the month prior to publication.

Membership is \$20 per year and includes a subscription to this newsletter and access to members only functions. Single copy price of the newsletter is \$1.50. General meetings are open to the public and start at 6:30 PM on the 1st Mon. of each month (2nd Mon. in the case of holidays) on the date and at the location listed on the cover of this newsletter.

Exchange newsletters, articles, correspondence and ads should be sent to the following address:
Portland Atari Club, Attention: (appropriate board member), P.O. Box 1692, Beaverton, OR 97005

Printing done by HILLSBORO QUICK PRINT, 435-B S.E. WASHINGTON ST., HILLSBORO, OR 97123, 640-3649

CLUB BUSINESS AND ACTIVITIES

President's Column
Chuck Hall

First of all I wish to thank our guests from ATARI for taking the time to visit with us. I also wish to thank those of you who came that night. It was a real treat for all of us. There were not as many as I actually expected for this meeting, but it was a good turnout. The way you handled yourselves and your questions was exemplary. I know that Sig Hartmann, Dave Duberman, and Leonard Tramiel were well pleased with you. I do not believe that those who did not show up, any longer have the right to complain about lack of response or attention from Atari. This was your chance to ask your questions and deal with those responsible in person. I am sorry that we could not get to all of your questions, but Leonard was about ready to give out up there and needed a break. I know that all three of them kept talking with you long after the formal meeting was over. All in all, it was a great night for our club. The main message that came across, was that we are important to Atari as a user group, and they are interested in what we think, and in what we want. They want to know what problems we are having, and what we would like to see in new products. But lets not forget the other hand also. If you like something they have done, or are doing, let them know that also.

Hopefully we will have a transcript of the meeting for our next newsletter. I have not had time to check with our Secretary/Treasurer yet as to the quality of the recording we made.

I thank those of you who have decided to volunteer your services as club officers for the next year. We still need more of you though. If you would like to run for a position, please let one of our current board members know. Myself if possible. You will have a 2-3 minute spot at the December meeting to let every one know what you like like, and to give you a chance to let everyone hear what you have to say. The next newsletter will also be available for you to get your ideas and reasons for running across to all of us. This is your club, so if you think you can or want to help, then please do so.

I wrote an awful lot last time, so I will keep this one short. There is a new magazine out with ATARI programs listed. I have recieved a few free copies of it which I will figure out how to give away at the next meeting. The name of it is "Home Computer" and it is published out of Eugene, OR. Issue 5.5 is the first one to include the Atari. One thing unique is that they do not accept advertising. Therefore the reviews and

articles can be more subjective and honest. It has programs for Atari plus just about every other personal computer known. You might look for it on the news stand and see what it is all about. I have also been receiving several offers lately from third party developers and others providing service for Atari users and their computers. I will try to have those written up for the next issue. See you next meeting.

Membership Secretary Notes
Debbie Pritchard

October meeting was super! If you missed it, you really missed something. The new memberships were up again. Thanks to Gail Horner helping me out we were able to process all of your applications very quickly, thanks Gail.

Our new membership and our renewals bring our total membership to 523 as of this writing. Of course, that number is always changing, so who knows what it will be tomorrow.

P.A.C. extends a warm welcome to all of the new members, and to the returning members.

New members in October are.

Daryl Calloway
Andrew Burke
Jeff Huntsman
Michael Callagan
David Clemans
Robert Metcalf
Corrie Lalangan
Christopher Cozad
Sharon Filey

Peter Hoesly
Sylvia M. Hester
Theodore Nibler
Graig Reynolds
David Amos
Rick Aldridge
James DePorter
Jim Graffy
Jay Schwichtenberg

We hope your association with the Portland Atari Club is long and fruitful.



The Crowd: Jim Berry, Sig Hartmann, Chuck Hall, Dave Duberman, Leonard Tramiel (?)

SIG CONTACT LIST

The following is a list of our current groups and the contacts for each:

ADVENTURE GAMES	
Russ Schwartz	646-6418
SIGASM (ASSEMBLER)	
Clyde Pritchard	648-0461
ATR-8000	
Jim Scott	281-6724
BEGINNERS	
Elanna Schlichting	285-4471
BULLETIN BOARD	
Steve & Debbie Billings	246-1751
BUSINESS APPLICATIONS	
Thomas Brown	644-6674
MODEM & COMMUNICATION SIG	
Jerry Andersen	655-3914
NLSIG (NEWSLETTER)	
Clyde Pritchard	648-0461
ST SIG	
Pat Warnshuis	246-3724

Assembler SIG Clyde Pritchard

We have started work on the project that I wrote about a couple of issues ago. We have a small group of people that make every meeting, and several more people that come every once in a while. We and especially myself, are not going to make any extra efforts to track people down for the meetings. Those who want to come and need info can see the newsletter or call me for information on dates, times and place. This doesn't mean that we don't want new members in our group, it just means that you will have to be the one to take the time and effort to be a part of the group.

I have now uploaded all 8 parts of Chris Crawford's Assembler Language Programming Class to the PAC BBS. As space allows, they will be printed in the newsletter. He has a lot of good things to say in the last part, so download it or stay tuned here.

Beginner's SIG
Elanna Schlichting

The Beginner's Group has had two major projects in the works in the last two months, both of which are nearing completion. The first project, the PAC introductory pamphlet, was finished and turned over to the Board for final approval and printing. We hope to see it in use in the near future. The second project, an introductory class to help new owners get the most out of their 8 bit machines, will begin in the next two weeks. This class came as the result of discussion about the nature of the current "Beginner's" group. We evaluated what we have been doing over the past year and realized that none of us were really beginners any longer. True, none of us know all there is to know about our machines, but we now have the knowledge to explore them on our own, or the willingness to find who has the knowledge we want and ask the questions to get it for ourselves. The only difference between new people and ourselves is that someone took the time to show us the basics needed to get our Ataris up and running, the rest has been up to us. So we have decided to pass this knowledge on to others in the form of a 4 week class taught by members of the Beginner's SIG. The class will cover setting up the machine, running disks, using the various DOS functions, copying files and disks, using the Translator Disk and so on. At the conclusion of the 4 weeks, we will offer the participants another 4 week series in which subjects of their choice will be covered. If you are interested, call me. The first series will start, as I said, in the next two weeks, but will be repeated as needed.

So much for our projects. The most recent meeting had Vern Vertrees as our speaker. Vern has been in the club about 4 years and has had a lot of varied experience with Atari equipment options. He talked to us about how he began with Atari and how his system grew. He went over the purpose of each part as he went along which included his work with the ATR8000, assembly language, CP/M, etc. The options available to the Atari user are incredible, when you consider the ability to add various components to the system. Vern gave us a glimpse of the many directions available to the exploring Atarian, but even more important, he talked about his attitude. For Vern, everything he does with his Atari is fun. He just enjoys exploring with his Atari, no matter how difficult or technical it may get.

In thinking about Vern, I began to consider a name change for the Beginner's SIG. What we are doing is really exploring the potential of our Atari's, so perhaps we should change the name of our group to the Explorer's SIG. Any comments?

Editor's Note: Sounds like a great idea to me. Keep up the good work.

~~~~~  
*Dealer's Corner*

|                                                                                   |                                                                                 |
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\* Discount is available to PAC members.

\*\* Each month, there will be an item available to PAC members at a special discount price.

- Some of the above stores are ST dealers only, so you might want to call first.

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*Special Interest Groups*  
*Thomas Brown*

It looks like next month's newsletter will have all of the SIG pictures that I have been taking. There were too many other photos to print this month to allow for the SIG **spotlight** feature.

**Business Applications**

I will have a sign-up sheet at the next meeting in order to get an idea of who and how many are interested in getting this group going again.

**Education**

There will also be a sign-up sheet for this group at the next meeting.

**Meeting Information**

Here is a list of meeting dates/times for some of the SIG's:

**Assembler SIG**

Dates: 1st & 3rd Tuesday

Nov 5th & 19th

Time/Place: 7:30 PM. / Call.

Leader: Clyde Pritchard

Phone: 648-0461

**Beginner's SIG**

Dates: 2nd & 3rd Tuesday

Nov 12th & 19th

Time/Place: 7:00 PM / Call.

Leader: Elanna Schlichting

Phone: 285-4471

**Modem & Communications SIG**

Dates: 2nd & 4th Monday

Nov 11th & 25th

Time/Place: 7:00 PM / Call.

Leader: Jerry Andersen

Phone: 655-3914

**ATARI ST SIG**

Dates: 2nd & 4th Thursday

Nov 14th.

No meeting 11/28 (Thanksgiving)

Time/Place: 7:00 PM / Beaverton HS

Leader: Pat Warnshuis

Phone: 246-3724

For information on Sig activity call SIG Leaders or myself, Tom Brown, 644-6674, I'm always looking for new ideas and ways to help the existing SIG's, so let's hear from you.

**Enjoy Your ATARIS!**

*BBS Update*  
*Steve Billings*

Yes, the second club bulletin board is still in the works, in fact, by the time you read this it may be up and running.

Don Adams has volunteered to run the new board. Don has been running a board called "The Magical Mystery Machine" for some time and is an experienced sysop. He has some definite plans for the new club board that is a little different from the old board.

Rather than general chit-chat, the message bases will be devoted strictly to the Atari machine and how it works. There will be message bases for discussion and help about programming languages such as assembler, Action!, BASIC, and C.

There will be a "HELP" section for Atarians to ask questions and help each other explore their machines. Don says he might not know all the answers so everyone has to warm up their modem and pitch in.

Another area on the board will be devoted to hardware modifications and projects. If you found a way to improve your Atari, let the rest of the club know about it!

There will not be a large collection of download files. The few that will be available will likely be only short examples or text files. This should free up the board so that more callers can get on.

Remember, this is your board so let us know if this is the type of thing that you want. It will be open to PAC members only. These ideas are tentative at this time and we solicit your input. If you would like to discuss these ideas do one of the following:

Call the current PAC BBS at 245-9405 and leave a message to sysop.

Call Don Adams by voice at 245-7168.

Call me, Steve Billings at 246-1751.

Or collect your thoughts on paper and mail them to the club at P.O. Box 1692 Beaverton, OR 97005.

The new phone number for the PAC BBS #2 is not known at the time of this writing, but by the time it is published it will be available on the PAC BBS #1. So call there first to find out.

Don is looking at some new BBS software that promises to be fast and fancy. If it works out, I will have some more information about it next month. This board is a test site so call it up and test it out, then let Don know what you think of it.





I'm Surrounded: Leonard Tramiel

### *C Programming Class Clyde Pritchard*

**Stop the printer!** Late breaking news item! Did I get your attention? Good. Anyway, the news is that Pat Warnshuis, ST SIG Leader - former Assembler SIG Leader - former PAC Newsletter Editor - and all around good guy, will be teaching a C programming class starting the first week of November.

Here are the details so far. The class will be for both the 8 and 16 bit Atari computers. Pat is planning to use the latest version of Ace C from Ralph Walden for the old reliables, and Hippo-C for the ST's. Pat has gotten a special price on the Ace C package, \$25 versus the regular \$35.

The class will be 5 or 6 sessions, and there will be a fee of \$? (I forgot to ask). These first sessions will cover C programming as applied to both systems, so everyone should be able to learn it, no matter which system they have. At the end of this class, Pat will probably offer an ST specific class that goes into the ST hardware, etc. If there is enough interest, he may offer a similar class for the 8 bit systems.

Come to the November Meeting or call Pat at 246-3724 for more information. All information in this article is subject to change, so verify it with Pat.

### *Atari Trivia Quiz Reprinted From PACUS*

OK, trivia fans, here are ten questions that should strain your brain. If you get eight or more right consider yourself an Atari Addict!

1. What is Zyzygy?
2. What movie, set in the far future, displays a faint "Atari" billboard in the background of one scene?
3. In the Broderbund game, "Choplifter" how many total hostages are there per game?
4. In the Gamestar game, "Star League Baseball", what are the names of the three pitchers you can use?
5. In the Electronic Arts game, "M.U.L.E.", what is the significance of Irata, the planet you land on?
6. What is the planet called in the Commodore version of M.U.L.E.?
7. What do the initials of A.N.A.L.O.G. magazine stand for?
8. What three states can you fly around in Microprose Software's "Solo Flight"?
9. At which university was BASIC invented?
10. Who were Coleen and Candy?

Answers on page 15.



### *PEEKing Around Vern Vertrees*

This is a test. This is only a test. For the NEXT thirty seconds you will be reading a test. The rest will be up to you. First I will give you my idea of what I would like to do with this column. I would like to GOTO your home, take a PEEK at Your system, get some INPUT from you, STEP back and take a picture. FOR-NEXT I will DIMENSION the VARIABLES, and try to OUTPUT this to the PAC newsletter. You can see that right from this DIM start I'm going to need your help, FOR without a system to look at, there's no PRINT statement.

For a start I thought I would give you a PEEK at my system, just to show you what I'm after. I bought my first computer five years ago (Atari 800) along with a 410 recorder, a BASIC cartridge, and an issue of ANTIC Magazine. After typing all night I finally got to see something on the screen. **ERROR!!!**"#%&'@. Anyway not to bore you, I signed up at PCC for a class in basic computers. From there I went big time with a ATR 8000, a printer, and a disk drive, but still very little knowledge of what I was doing. From a friend I heard about the P.A.C. and of course I joined. Life has never been the same. My wife changed. She had never accused me of loving a machine more than her. She even thinks that I would rather stay up all night with my computer, than go to bed. I don't know where she gets that idea Yawn Yawn. Oh well, I think you get the drift. Computers have

changed my life. They are always challenging my mind, whether it's playing a new game or learning a new language, it is never dull.

My computer system now includes my ATARI 800, 800XL, 130XE, 520ST, my ATR8000 256K, two Atari 810s, four Teac half height drives, A Prowriter printer, and a MulitiTech MultiModem, not to mention enough software and documentation to last me the rest of my life. For some reason though I always want more. I also have a WYSE 50 terminal for my ATR8000 and I use it for my CP/M and MS DOS programs.

Well from this maybe you can see what this column is going to be all about. It's about you, and how computers have affected you and others around you. I will also want to know how you have benefited from the club if any, and what direction you would like the club to go. I would also like to know what you could do that would help the club. We all know that we have a great computer for games and business. We also know that their are a lot of people out there that could use our help in getting started. That's where we shine. We are a very versatile group when it comes to computer systems and our knowledge to use them. well enough soap box for now. Think about it then call me at 503-647-2855. Let's feature your system next..... Hummm I wonder if I could convince my wife that this is really work??



Computer Command Central



## NEWS AND REVIEWS

*HIPPO-C for the ST**Barry Levine*

After many keyboard adventures, I succeeded in creating an executable version of the cosine 'C' program, in the October 'Antic.' I was using the DRI/Atari C Development system, which consists of the Mince text-editor, a Compiler disk, and a Linker disk. Unfortunately, I have only one drive, and it was a while before I got used to the endless pattern of editing the program on the Mince disk, copying it to the compiler disk, compiling it, copying the object module to the linker disk, renaming it to match my all-purpose .INP file, linking it, then, finally, executing the .PRG file. The finished product was, of course, much less enchanting than similar demos which have been wowing us ST owners from the start.

I was ready for more, and, fortunately, the November 'Antic' had a sound program which looked much more interesting. I cannibalized the basic start-it-up routines from the cosine program, and, using Mince's fast cut-and-paste tools, quickly built the sound program. It executed the second time, after the normal excruciatingly-slow compiles and links.

A couple of days later, a well-known local Atari dealer put a copy of Haba's HIPPO-C development system in my hands, and, two minutes later, I put the required cash in his (and a reasonable price it was, with the Club discount). I was pleased to see that the increasingly-familiar VDI and AES bindings are listed in the accompanying booklet, along with the standard GEMDOS functions. The idea of having it all--editor, compiler, linker, and HELP--on one disk was quite exciting, and I rushed home and went to bed. It wasn't until the next Saturday morning, after my wife had left for the law-library and I'd had several cups of very fine coffee, that there was time to really boot it up and check it out.

I began by making a backup copy. Everything appeared normal until the 'Sorry, there's a problem' message flashed up. A quick trip to page 2 revealed that the disk is copy-protected. I aborted the copy, and checked the directories of both disks; the file-names and lengths were identical. You can copy the files, but the backup won't execute. The manual states that you can run HIPPO-C from your hard disk, but the original MUST be in drive A. Got it?

I double-clicked HOS.PRG on the original and nothing happened. The last step in installing the system is to copy the DESKTOP.INF file supplied

with the HIPPO disk to your system boot disk. Then, reboot, open the HIPPO disk, double-click HOS.PRG, and the main menu appears. Both Control-S and -C work, which is a good thing, since if you don't stop the scrolling, you'll watch the first couple of commands disappear real fast. You get an A: prompt, and we're ready to go. LS gives you a directory listing. I edited one of the supplied files, and, using the HELP key, managed to move around and get out without doing any damage. I copied the sound program from my Mince disk to the HIPPO disk, fired it up, and ('ed sound.c') prepared to edit. No go. The C source file must be in the folder identified as 'usr '. The HIPPO-C commands and file-structures are intentionally UNIX-like. This may be a big benefit for you, depending on where you normally program--I spend most of my time in mainframe IBM-world, so this is not a big deal to me.

In the editor, commands are always available through the HELP key, and are arranged logically. All of the normal features are present; cutting and pasting work fine, and scrolling and general cursor-movement is fast. The only cosmetic difficulty I had was that inserting characters sometimes caused the lines to split--within a word--and I couldn't seem to rejoin the split pieces. I couldn't find anything in the HIPPO manual (a fifty page booklet, with no Index) to explain this. Anyone have any ideas?

I made a few enhancements to the Antic program, and saved the new version. I invoked the compiler, clicked my stopwatch, and prepared to be dazzled by the ease and speed of the journey to Executable-Program Land. Didn't get very far. The compiler didn't care for my #include statements. I replaced the <>'s with '"', and commented out all files but stdio.h. It was a genuine pleasure to do all that without changing disks, opening Mince, etc, etc, etc. The second compile wot much further, but only far enough to tell me that HIPPO-C didn't handle the floating-point routines in the program. Sure enough, page 1 states that all 'K and R' standards are followed, except floating-point. The ST version of HIPPO-C will not compile a program typed directly from 'Antic.' This alarms me, since it means I must dig into 'C' enough to make some necessary conversions, and I thought it was all going to be easy. Oh well.

Now consider: the DRI C Development system is cumbersome and primitive, but it got the job done. It is not copy-protected, so I know my archive

continued...



copy is completely safe. It takes a long, long time to go through the Edit/Compile/Link cycle, but that won't be true (for either system) with a hard-disk or a nice large RAM disk, either of which will be in place one of these days. Mince is a suitable text editor, and HIPPO-C does not have Mince's split-screen capability, which, as in mainframe SPF/TSO, I find indispensable. HIPPO-C's unified environment is friendly and simpler (at least as far as I've gotten), but there are limitations, like the requirement that HIPPO-C source files fit into RAM. (Haba recommends that modules be limited to less than 500 lines of code--about 2000 is the maximum.)

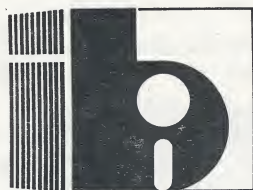
Anyone want to buy a used HIPPO-C? It seems reliable, and might be exactly what you need, but for me, right now, it's not quite enough to get me to switch from what I already have.

#### Editor's Comments

Well folks, how was that for our first real ST article? (I don't count Steve's review of Mud Pies, because he did it on his 800XL with AtariWriter.) I thought it was excellent, and I don't even have one of those fine new toys.

This article even made it from the 3.5" micro-floppy and STWriter to my 130XE its 5.25" floppy disk and The Writer's Tool via Steve Billings 520ST. We just did a system to system transfer with our communications programs. We did have a problem with the XMODEM transfer for some reason, but capture mode worked fine. The file ended up without returns between paragraphs for some reason, but I think I got most or all of them figured out.

How about some more ST articles from you people with ST's? I hear that there are close to 60 of you in the ST SIG. Thanks to Barry for a great job.



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### *Lode Runner's Rescue* *Clyde Pritchard*

Lode Runner's Rescue - the sound of it sends chills down the spine of any avid Lode Runner player. How could those Bungeling guards have caught and captured the fearless Galactic Commando, Lode Runner? Well according to Synapse (a Broderbund company) and programmer Joshua Scholar, they did.

Therefore, your mission as Alexandra, Lode Runner's daughter, is to make your way through 46 levels, staying away from the guards, and collecting keys to free Lode Runner from his cell. You must walk, run, jump, swim and eat magic mushrooms to do this, but you are Lode Runner's only hope.

You will earn points for each key that you pick up, and you must find all of the keys on a level before you can get to the next one. You can earn bonus points if you get done quickly. You start with four lives, and earn one every 10,000 points.

Now for the hard facts. If you are a true Lode Runner fanatic, you should have noticed that this program wasn't written by Doug Smith, the programmer that wrote Lode Runner, and isn't directly from Broderbund, the original publisher of Lode Runner. The concept is similar, but this game probably could have had almost any other name. It might not sell as well with another name, but I'm not sure it actually started out to be what it is.

One major difference is the 3-D graphics effect, which seems to be very well done and has little noticeable flicker. It definitely makes the game more challenging, but I don't think it really adds to the action as claimed on the box. The box also claims great sound effects, and it could be right, especially if it means the sound of rushing water when Alexandra goes for a swim. The other sounds are a tink when you find a key and music when you complete a level.

The 3-D effect also includes loss of visual contact with Alexandra (and sometimes the guards), and when this happens, you get bumping sounds when you run into walls. You have to get used to these effects in order to be able to play the game, but once you do, you will be off and running.

I have gotten through the first 12 levels, and have looked at most of the others with the game editor. A few are simple, but most of them will keep you busy; either figuring out how to get through, or how to keep away from the guards.

Yes, Lode Runner's Rescue includes a game editor just like the original. It works differently than Lode Runner's editor, but is still less than easy to use. You get to use the joystick this time, but only to move the cursor; everything else is done on the keyboard. There is a special mode for testing your screens before saving them to disk.

I do like this game, and expect to get many hours of stress and enjoyment out of it; but I still like the original Lode Runner better. I am looking forward to Championship Lode Runner next month (it is available on the Atari now).

---

### *ANTIC APX Software* *Clyde Pritchard*

ANTIC is one of the top three magazines for Atari computer users, the other two are ANALOG and the ATARI EXPLORER. Several months ago ANTIC revived APX, the Atari Program eXchange. APX includes both public domain and copyrighted software, and there seem to be more new programs added every month.

Almost all of them, especially the copyrighted programs, seem to be excellent. I haven't tried all of them out, but I do have several of them, and if I had the money, I would have more of them. Several of the programs are from the original Atari APX catalog, and some of these are newer versions. There are also many new programs, and there is even a new program for the 520ST this month, but most of the programs are for our good old 400, 800, 1200XL, 600XL, 800XL, and 130XE systems. Just reading the descriptions of most of these programs confirms the fact that we are using a great computer.

The prices are great too, the highest is \$29.95, and that's for the ST program. Most of the other programs are less than \$20. The public domain disks are just \$10. The catalog is part of ANTIC magazine each month, at least for subscribers, and can also be seen at dealers that sell APX software. IB Computers has a pretty good stock of these programs, so you might want to check them out.



### *Why I Hate Clowns* Steve Billings

When I was little I was frightened of clowns. I did not enjoy things like circuses and Rose Festival parades because they always contained clowns. Clowns could not be trusted. They wore disguises so that you could not identify them. One moment they were trying to be your friend and the next thing you knew they were squirting you with water or playing a joke to make people laugh at you.

Is that the kind of person you can like? Not me.

By coincidence the first game available for the Atari 520ST has clowns in it. Oh, no, you might think, but this intrigued me and when I discovered that the object of "Mudpies" was to hit the clowns in the face with mudpies I yelled "HURRAY!, sweet revenge".

Mudpies is from a software company called MichTron. I don't know much about them, but they have come out with several things for the ST right off the bat. So, three cheers for Michtron.

Since this is the first arcade game for the ST it is also the first opportunity to get a glimmer of the potential of the ST's animation and sound capabilities. I was not disappointed. The animation was clear and smooth and very sharp. The characters in the game are small. On my 800XL the objects would be blobs, not little clowns to smash in the face with tiny pies. The music and sound effects are great too. It plays circus tunes and knows about half a dozen. The sound is as clear as the picture.

Meanwhile back to the game. I got into it with a vengeance. The game is similar to Robotron or Crazy Shootout. You control a little guy named Arnold who runs through different rooms. Each room is full of mudpies on the floor and clowns dancing around. You can pick up the pies and hurl them at the clowns. If you hit them they are knocked off the screen. You get points for hitting them, so go get 'em. The clowns are juggling pins and they throw them at you. (I told you that you could not trust them.) Fortunately they are not very accurate and in the early rounds are easy to dodge. Also in the room are various items of McDonald's foodstuffs. You have to eat these on occasion to keep up your strength, but don't eat too much or you will not be able to run fast enough to keep away from the clowns.

The object is to knock off the clowns and go through as many rooms as possible. If you can set the new high score there is a real neat sound effect, just like some one tapping on glass or a free game noise on a pinball machine. It makes me jump everytime.

Since this is the first arcade game for the ST, there is nothing to compare it to as to quality. Compared to games for the 800 it is good, but not fantastic. The picture and sound are superior to the 800, but the game does not really go anywhere. Even I get tired of hitting clowns in the face after 20 minutes or so, and eventually the clowns do win. As you advance through the rooms the clowns home in on you, and throw the pins more often.

Oh well, I feel better anyway, it is good therapy to knock three clowns off the screen with one pie. The 520ST may not be just a "game machine", but it is going to be a good one during those breaks between computing data files!

~~~~~

Mapping The Atari Clyde Pritchard

Mapping the Atari, by Ian Chadwick, is published by Compute! Books, and sells for \$16.95. This is a revised edition, updated to include the XL and XE computers. There are also a few corrections and additions to material in the first edition. The best thing (for XL/XE owners) is the addition of 9 new appendicies for the XL/XE systems. There is even one on DOS 2.5 and the 1050 disk drive.

For everyone that does almost any kind of programming on an 8-bit Atari computer, this book is a definite must for a source of information on how the system works and what memory locations do what when you do something to them.

I'm not going to delve any further into this subject, you can take a look at the book when you go to the store.

BASIC XE *Clyde Pritchard*

BASIC XE (BXE) is the latest product of Optimized Systems Software (OSS). For those of you that are new to the world of Atari computers, OSS has been developing software for Atari computers since the beginning. They developed both Atari BASIC and DOS 2.0 for Atari. Their first improved version of BASIC was BASIC A+, then they came out with BASIC XL, followed by the BASIC XL Toolkit. Now there is BASIC XE. Other products from OSS are ACTION! (a high level, structured and compiled language), MAC/65 (a macro assembler), Toolkits for ACTION! and MAC/65, The Writer's Tool (a word processor with spelling checker and more), and DOS/XL (a CP/M-MS DOS like DOS for single and double density drives, formerly called OS/A+).

BXE is designed to run only on the XL and XE computers that have a minimum of 64K. It will not boot, with or without the extensions, on an 800.

Both BXE and BXL offer many advantages over standard Atari BASIC (AB). In summary, these are faster execution, structured programming support, built-in player/missile graphics support, additional input/output (I/O) support, and program development and debugging support. BXE offers only three new statements over BXL, but one of them, EXTEND, opens a whole new world to the BASIC programmer with a 130XE. The other two statements are BSAVE AND BLOAD, which are used to save and load binary files, i.e. machine language code from assembler language programs that are called by the BASIC program.

The EXTEND command sets up the system so that the BASIC program is stored in the upper 64K of the 130XE. The RAM (Random Access Memory) in the lower 64K normally used for both the program and its data (variables, etc.), is now available to store just data. This gives you up to about 35K of data storage space. Sounds nice, doesn't it?

So what does this cost? Well in addition to the price of a 130XE (\$150) and BXE (\$79), it costs you some additional boot time and 91 single density sectors on your BXE boot disk. This is because many of the special features of BXE are loaded in from disk. Even though BXE is an OSS SuperCartridge (bank select), there just isn't enough room to get everything into the cartridge. The thing that I don't like about this, especially compared to BXL, is that many of the frequently used statements are loaded from disk. The BXL Toolkit includes language extensions, but they aren't things that you need for every program. It includes only PROCEDURE, CALL, LOCAL, EXIT, SORTUP and SORTDOWN. The disk loaded extensions for BXE

are BSAVE, CALL, DEL, EXIT, FAST, LOCAL, LVAR, MOVE, PROCEDURE, RENUM, RGET, RPUT, SORTUP, SORTDOWN, the fast math routines and all P/M commands except HITCLR. The underlined statement names are those that I feel should have been left in the cartridge. These statements, with the exception of FAST, are standard program development commands whereas the others aren't needed at all times. Undoubtedly there are several design reasons for this situation, but it seems too bad that things ended up this way.

The other item that BXL offers is the Runtime Package. This allows you to develop programs in BXL and set them up so friends without BXL (poor souls) can run them. I don't know if this is planned (or possible) for BXE, but it is a nice feature.

Another possible cost of BXE is the loss of the DOS 2.5 RAM disk. If you are using the extended mode, you cannot use the RAM disk. BXE is supposed to give you an error if you have the RAM disk active and issue the EXTEND command, but there is a slight problem. OSS notes in the documentation that they followed Atari's recently published guidelines on extended memory usage, but early versions of DOS 2.5 do not. I'm not sure how we find out which versions of DOS 2.5 are right, but the one I just got with a 1050 drive last month must not be, because I had the RAM disk installed, issued the EXTEND command, and it worked. At that point, my program and the files on the RAM disk (DUP.SYS and MEM.SAV) seemed to be OK, so I tried an experiment. I wrote a program that filled up the RAM disk with data, then another program to read the data back in. I rebooted and ran the fill program in normal mode, then loaded the read program and issued the EXTEND command. Everything was OK at this point, so I ran the read program. It failed with an error 10, expression too complex (Get #1,D), after reading the first 125 bytes of the data file. Interesting? I guess this isn't a big problem, because you should know what you are doing and use either EXTEND or the RAM disk, but one needs to be careful unless you have the right combination of BXE and DOS 2.5.

In spite of these little quirks and differences, BXE seems to be another winner. It is still upward compatible from AB and BXL, and has the features that make BASIC a powerful language. If you don't think (or know) that you want to write giant BASIC programs, you may want to consider BXL rather than BXE. As I noted, it has

continued...

Blackjack
Clyde Pritchard

almost everything BXE has, and works on all Atari computers (ST's excluded). Now all I need is a RAM disk that works with DOS XL.

Excerpts from another review of BASIC XE

From Bill Penner of the Puget Sound Atari News:

..... Basic XE, like all other programs, is not perfect. There have been two versions of the program that I am aware of, and the most recent version appears to still have a bug in it (not good enough to be a feature). Before you buy Basic XE, make sure that it is version 4.1. The version 4.0 has a problem when doing the ADR() command in extended mode. The program returns a location which is apparently 4 bytes off of where the string really is. This creates major problems with machine language programs that are run in variable strings. (PAC Editor's Note: 4.1 has a SET 15,1 command to fix this. I don't know if it was in 4.0.) Version 4.1 has a bug in the extended trace function. It appears that if the trace mode is enabled, the program will work properly until the program must execute consecutive line numbers across one of the 3 16K edges. The program just stops and dumps out to the ready prompt as if an 'END' statement had been executed.

Basic XE has another little quirk that causes some problems. Basic XE makes use of ZIOCB and FMSZPG flags on the zero page of memory for temporary floating point storage. The flags are used by various I/O routines such as the disk and RS232 drivers. Under most conditions, there is no problem, as when using the disk drive. The flags are only used while the operation is in progress, and are not necessary following the completion. When RS232 concurrent mode is enabled, a couple of flags are continuously being used in the FMSZPG area by some RS232 handlers. When concurrent mode is enabled, and then a mathematical operation is performed, the above stated zero page flags are modified to unknown values. When another RS232 command is performed, unknown results can occur.

I have managed to modify the handler that I use for my ATR8000 and have worked around the very minor problems I have stated above. My Atari Basic cartridge (revision C...that's why I even have a cartridge) has gone unused since I received my Basic XE software, and I will not use it if I can ever help it.

I have always enjoyed playing Blackjack for fun, and had an excellent version on my old Atari 2600 game system. I always hoped that the same program would come out for the real Atari computers, but it never has.

Anyway, the purpose of this article is to review Ken Uston's Professional Blackjack (KUPB) which is published by Screenplay, and sells for about \$70. It is packaged in a hard plastic case and includes a short set of operating instructions, a longer book on blackjack, and the program disk. When you send in your warranty card, you can get a copy of Million Dollar Blackjack, an \$18.95 hardcover book for just the shipping charges. The program is written in FORTH. Its purpose is to teach you how to play blackjack using Ken Uston's system so you can beat your favorite casino.

To accomplish this, the program has drills on the card counting systems and strategies in addition to the play blackjack mode. The drills are done flashcard style, and keep you on your toes while teaching you how to play the game.

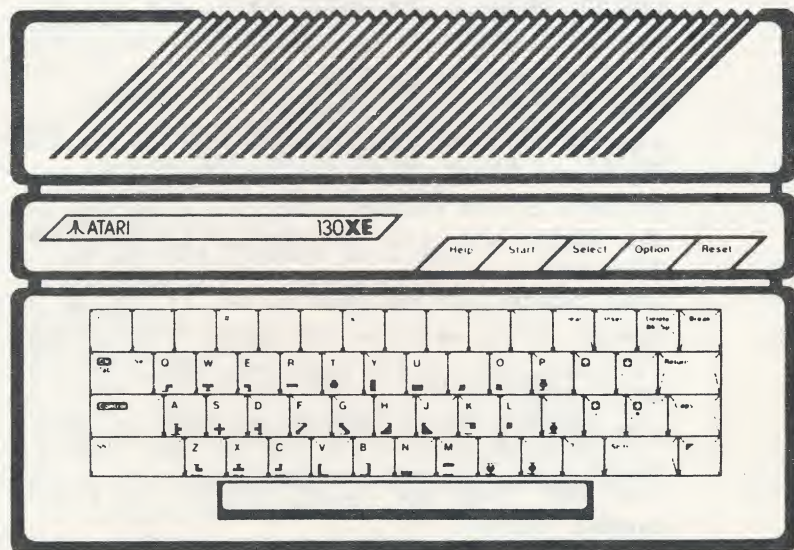
In the play blackjack mode, you get to select the casino that you wish to play in from a long list of real casinos. The idea here is that each casino has its own rules, so to practice for playing there, you need to play by their rules. The computer acts as the dealer against 6 players. The players can be keyboard or computer controlled. This is one of the things that makes the game less fun, it is keyboard driven rather than allowing for a joystick option. You also select the size of each player's bankroll, their betting strategy and how much each chip is worth. You can save and recall these seating arrangements to and from disk.

As you play the game, the program lets you know if you made a strategic error, based on the strategy that you selected. You can also have a display of the card count info if you need extra help. The overall display quality is good and uses character graphics. The only problem that I had was reading the card values. This is because they are displayed overlapping each other, and you only get to see the value at the bottom of the card, and true to life, it is upside down.

The program also includes two advanced options, editing casino rules and defining alternate card counting systems. All in all, this seems to be a very good program, especially from the educational viewpoint, but I still prefer to play those that are more for the fun of it.



Contemplation and Preparation: Leonard Tramiel, Dave Duberman



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H O W T O D O I T

Typewriter Simulation
Lee Gassaway

When my daughter came home from school and announced that she had to have an **electric typewriter** to practice her typing class assignments on, I said "NO WAY"; at least while I have my faithful ATARI around!!! I proceeded to endeavour to make a simple program to mimic an electric typewriter.

The BASIC program works like this:
Get an Input from the keyboard.
Analyse the Input and Put it on the screen, or if the Input is a RETURN; then print the line (to a printer).

Here is the program listing:

```
10 PAGE=80:MARGIN=5:REM PAGE SIZE AND MARGIN WIDTH
20 C255=255:C764=764:C155=155:C1=1:C2=2:C3=3
30 PAGE=PAGE-C2*MARGIN:BELL=PAGE-4
40 TRAP 100:OPEN #C1,4,0,"K:":OPEN
#C2,8,0,"E:":OPEN #C3,8,0,"P:"
50 PUT #C3,18:PUT #C3,C155
60 DIM A$(PAGE),BL$(MARGIN)
70 BL$=" ":BL$(MARGIN)=BL$:BL$(C2)=BL$
80 ? " *** Typewriter Simulation ***"? " by
Lee Gassaway * 10/04/85 *"
100 POKE C764,C255:LOC=1:?
110 A$=" ":A$(PAGE)=A$:A$(C2)=A$
200 REM INPUT FROM KEYBOARD
205 GET #C1,X:IF X=C155 THEN LPRINT BL$;A$:PUT
#C2,X:POKE C764,C255:GOTO 100
210 IF LOC>=PAGE THEN PUT #C2,253:GOTO 200
215 IF X=30 THEN LOC=LOC-(PEEK(85)>2):GOTO 280
220 IF X=31 THEN LOC=LOC+((LOC<PAGE) AND
(PEEK(85)<39)):GOTO 280
230 IF X=28 AND LOC>38 THEN LOC=LOC-38:GOTO 280
235 IF X=28 AND LOC<39 THEN X=253:GOTO 280
240 IF X=29 AND LOC<39 THEN LOC=LOC+38:GOTO 280
245 IF X=29 AND LOC>38 THEN X=253:GOTO 280
250 IF X=126 THEN A$(LOC,LOC)="
":LOC=LOC-(LOC>1):GOTO 280
260 A$(LOC,LOC)=CHR$(X)
270 LOC=LOC+1
280 PUT #C2,X
290 IF LOC=BELL THEN PUT #C2,253
300 GOTO 200
```

Now a detailed explanation:

Line 10 Sets the maximum line length to 80 (you can change PAGE to any other number you wish, i.e. 40 or 132). You will then also have to adjust the printer setup code in line 50 for your selected printer width. The margin is the number of blank spaces from both sides of the page between which the text will be printed. MARGIN=5 means there is a margin 5 characters wide on the left and at

least 5 characters on the right.

Line 30 Sets the BELL buzzer to 4 spaces before the end of the line.

Line 40 In this line we make the Atari Computer modify itself so that we can control things. First we OPEN channel #1 to GET (4) what is coming from the KEYBOARD ("K:"). Second we OPEN channel #2 to PUT (8) what we want to the screen EDITOR ("E:"). This allows us to PUT cursor control commands to the screen without having to worry about too many details. Third we OPEN channel #3 to PUT things to the PRINTER ("P:").

Line 50 We PUT character #18 followed by #155 (RETURN) to initialize my EPSON printer to 80 column mode. (Editor's Note: If you don't have an EPSON, you may have to change the 18 to something else, or maybe just remove line 50 if your printer's default mode is 80 column. This is also where you would change your printer to 40 or 132 column mode if you make the changes mentioned in the explanation of line 10.)

Line 60 DIMensions the STRING variables to what we need for our page size and margin selection.

Line 70 Fills BL\$ with blanks.

Line 80 Displays the program title on the screen.

Line 100 Prepares the Keyboard so we are ready for the first INPUT of the line.

Line 110 Fills A\$ with blanks.

Line 205 GET's the input from the KEYBOARD. IF the input was RETURN, THEN print the line BL\$(margin) followed by line A\$(page); then PUT a RETURN to the SCREEN and goto the start of the next line (Line 100).

Lines 210-245 Test the input to see if it is a command which would put the cursor outside of the line(page) size. IF the input does, the RING the BELL (#253).

Line 250 Tests for the DELETE BACK SPACE key being pressed.

Line 260 Place the output into the line at the current location.

Line 270 Move to the next location.

Line 280 PUT the INPUT on the SCREEN.

Line 290 IF the LOCation is 4 from the end of the line, then RING the BELL.

Line 300 GOTO GET the next INPUT.

PEEKs and POKEs
Kenneth J. Pietrucha, JACG

(PAC Editor's Note: This article is from the September 1985 issue of the JACG (Jersey Atari Computer Group) Newsletter.)

Last month's column on reading the joystick ports was really in anticipation of this month's article. I had originally wanted to demonstrate how to POKE screen color changes, but with all the colors available on the Atari, the only efficient method I could think of was to use the joystick to make the changes.

I must assume that we are all familiar with the BASIC SETCOLOR command. If we take the BASIC color 12 and luminance value of 8, we can change the screen color using the command SETCOLOR 0,12,8.

The other way, which I think is a little faster and more popular, is to POKE certain locations. To calculate a color to be POKEd, take the BASIC color and multiply it by 16, then add the luminance value. In our example SETCOLOR 0,12,8 becomes $(12*16)+8$ or 200, which is then POKEd in location 710.

The border is poked separately by POKE 721,200 and letter brightness is controlled by a POKE 708,X, where X is an even number between 0 and 14.

That's it! A POKE to 710 for the screen, 712 for the border and 709 for letter brightness.

Now for the demonstration. Try this joystick color program and see what I mean.

```
2 REM PEEK/POKE-7/85
3 REM JOYSTICK & SCREEN COLOR DEMO
4 REM KENNETH J. PIETRUCHA ** JACG
5 GRAPHICS 0
6 A=96:B=102:C=10
7 PRINT "PUSH UP AND DOWN TO POKE SCREEN"
8 PRINT "PUSH LEFT AND RIGHT TO POKE BORDER"
9 PRINT "USE FIRE BUTTON FOR LETTER BRIGHTNESS"
10 IF STICK(0)=14 THEN A=A+2:IF A>256 THEN A=256
12 IF STICK(0)=13 THEN A=A-2:IF A<0 THEN A=0
20 IF STICK(0)=11 THEN B=B+2:IF B>256 THEN B=256
22 IF STICK(0)=7 THEN B=B-2:IF B<0 THEN B=0
30 IF STRIG(0)=0 THEN C=C+2:IF C>14 THEN C=0
40 POKE 710,A:REM CONTROLS SCREEN
42 POKE 712,B:REM CONTROLS BORDER
44 POKE 709,C:REM CONTROLS LETTER BRIGHTNESS
45 FOR DELAY=1 TO 100:NEXT DELAY
50 GOTO 10
```

PAC HELP HOTLINES

The following people have generously offered to take telephone queries in the areas indicated.

Adventure Games	Russell Schwartz	646-6418
Assembly Language	Leroy Baxter	653-1633
BASIC Programming	Nick Yost	981-0838
	Lee Gassaway	642-2455
BBS Usage	Steve Billings	246-1751
	Don Adams	245-7168
	Russell Schwartz	646-6418
C	Randal Schwartz	643-1089
Cassette Operation	Lee Gassaway	642-2455
DOS Operations	Gary Lippert	233-7069
FORTH Programming	Ricky Wooldridge	224-7163
Hardware Operation	Gary Lippert	233-7069
Modem Operations	Gary Lippert	233-7069
Operating System	Nick Yost	981-0838
	Leroy Baxter	653-1633

Atari Trivia Quiz Answers

1. Zzyggy is the name Nolan Bushnell originally chose instead of "Atari". Zzyggy produced the original Pong game.
2. Blade Runner.
3. Sixty-four.
4. Irata is Atari spelled backwards.
6. Irata. What did you expect, "Erodommoc"?
7. Atari Newsletter, And Lots Of Games.
8. Kansas, Colorado, and Washington.
9. Dartmouth.
10. "Colleen" was the code name for the Atari 800, and "Candy" was the code name for the Atari 400.

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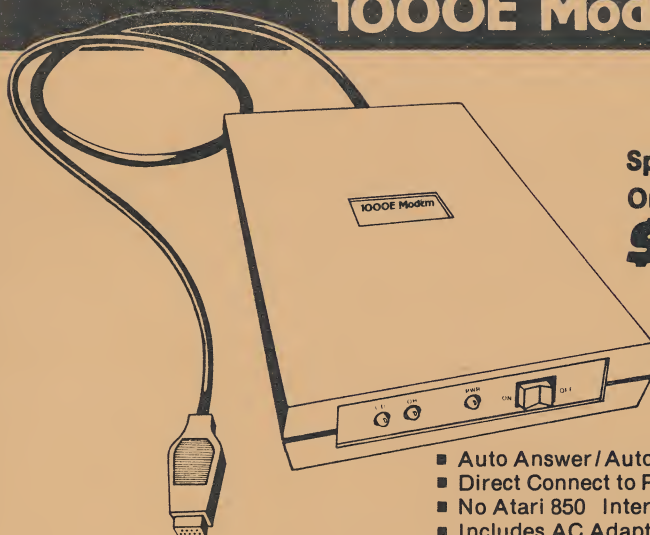


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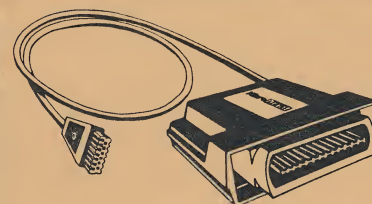
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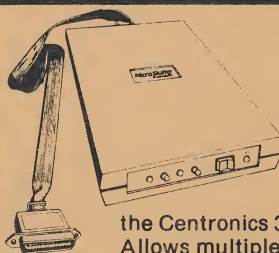
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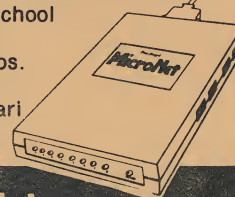


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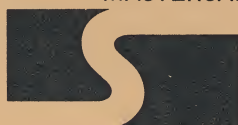
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Words to Ponder: Sig Hartmann

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